

SEQUENCE LISTING

<110> INSTITUT DE LA RECHERCHE POUR LE DEVELOPPEMENT (IRD)

<120> NOVEL AGENTS FOR THE PREVENTION OF LEISHMANIOSIS

<130> 1721-116

<140> 10/579,749

<141> 2006-05-18

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<160> 12

<170> PatentIn version 3.1

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<213> Leishmania amazonensis

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<213> *Leishmania amazonensis*

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<213> Leishmania amazonensis

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<212> DNA

<213> Leishmania amazonensis

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<211> 1501

<212> DNA

<213> Leishmania amazonensis

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<211> 371

<212> PRT

<213> *Leishmania amazonensis*

<400> 6

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 35 40 45

Val Leu Gln Ala Phe Ala Arg Ala Ile Pro Ala Leu Gly Asp Thr Trp
 50 55 60

Thr Gly Ser Asp Phe Cys Ser Trp Lys His Ile Ile Cys Asp Ser Pro

65

70

75

80

Gly Val Gly Val Trp Met Gly Asp Val Asp Tyr Thr Gly Thr Leu Pro
85 90 95

Glu Met Pro Ala Ser Val Asp Tyr Lys Asp Val Met Ile Thr Glu Leu
100 105 110

Asn Phe Ser Ala Met Gly Gln Gly Leu Ser Gly Thr Leu Pro Pro Ser
115 120 125

Trp Ser Ser Leu Thr Ser Leu Ile Ser Leu Cys Ile Glu Lys Ser Glu
130 135 140

Lys Val Thr Gly Thr Leu Pro Ala Gln Trp Ser Ser Met Thr Ser Leu
145 150 155 160

Asp Asn Leu Asn Leu His Asp Thr Ala Val Ser Gly Thr Leu Pro Ala
165 170 175

Gln Trp Ser Ser Met Lys Gln Leu Thr Val Leu Asp Leu Glu Gly Thr
180 185 190

Lys Val Ser Gly Thr Leu Pro Ser Glu Trp Ser Gly Met Ala Lys Ala
195 200 205

Glu Ala Val Gln Leu Glu Asn Cys Gly Leu Ser Gly Ser Leu Pro Pro
210 215 220

Ser Trp Ser Ala Met Pro Lys Leu Arg Ile Val Ser Leu Ser Gly Asn
225 230 235 240

His Phe Cys Gly Cys Val Pro Asp Ser Trp Arg Glu Lys Asp Arg Leu
245 250 255

Asp Val Thr Ile Glu Glu Trp His Met Gly Glu Asp Cys Lys Leu Ala
260 265 270

Asn Ala Cys Arg Pro Thr Ala Ala Pro Gly Thr Thr Thr Thr Asn Pro
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Pro Thr Thr Thr Gly Thr Pro Ala Ala Ser Ser Thr Pro Ser Pro Gly
290 295 300

Ser Gly Cys Glu Val Asp Gly Cys Glu Val Cys Glu Gly Asp Ser Ala
305 310 315 320

Ala Arg Cys Ala Arg Cys Arg Glu Gly Tyr Ser Leu Thr Asp Glu Lys
325 330 335

Thr Cys Leu Ala Asn His Asp Gly Gly Val Ala Ala Ala Ser Ser Gly
340 345 350

Ala Val Ala Ala Ala Ala Val Trp Ala Ala Val Leu Leu Ser Val Gly
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Leu Val Ala
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<210> 7

<211> 286

<212> PRT

<213> Leishmania amazonensis

<400> 7

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Gly Gln Gly Leu Ser Gly Thr Leu Pro Pro Ser Trp Ser Ser Leu Thr
35 40 45

Ser Leu Ile Ser Leu Cys Ile Glu Lys Ser Glu Lys Val Thr Gly Thr
50 55 60

Leu Pro Ala Gln Trp Ser Ser Met Thr Ser Leu Asp Asn Leu Asn Leu
65 70 75 80

His Asp Thr Ala Val Ser Gly Thr Leu Pro Ala Gln Trp Ser Ser Met
85 90 95

Lys Gln Leu Thr Val Leu Asp Leu Glu Gly Thr Lys Val Ser Gly Thr
100 105 110

Leu Pro Ser Glu Trp Ser Gly Met Ala Lys Ala Glu Ala Val Gln Leu
115 120 125

Glu Asn Cys Gly Leu Ser Gly Ser Leu Pro Pro Ser Trp Ser Ala Met
130 135 140

Pro Lys Leu Arg Ile Val Ser Leu Ser Gly Asn His Phe Cys Gly Cys
145 150 155 160

Val Pro Asp Ser Trp Arg Glu Lys Asp Arg Leu Asp Val Thr Ile Glu
165 170 175

Glu Trp His Met Gly Glu Asp Cys Lys Leu Ala Asn Ala Cys Arg Pro
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Thr Ala Ala Pro Gly Thr Thr Thr Thr Asn Pro Pro Thr Thr Thr Gly
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Thr Pro Ala Ala Ser Ser Thr Pro Ser Pro Gly Ser Gly Cys Glu Val
210 215 220

Asp Gly Cys Glu Val Cys Glu Gly Asp Ser Ala Ala Arg Cys Ala Arg
225 230 235 240

Cys Arg Glu Gly Tyr Ser Leu Thr Asp Glu Lys Thr Cys Val Ala Asn
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260 265 270

Ala Val Trp Ala Ala Val Leu Leu Ser Val Gly Leu Val Ala
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<210> 8

<211> 310

<212> PRT

<213> Leishmania amazonensis

<400> 8

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Val Asp Tyr Lys Asp Val Met Ile Met Ala Leu Asp Phe Gly Ala Met
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Gly Gln Gly Leu Ser Gly Thr Leu Pro Pro Ser Trp Ser Ser Leu Thr
35 40 45

Ser Leu Met Ser Leu Trp Ile Glu Lys Ser Glu Lys Val Thr Gly Thr
50 55 60

Leu Pro Thr Gln Trp Ser Ser Met Lys Gln Leu Thr Leu Leu His Leu
65 70 75 80

Lys Gly Thr Lys Val Ser Gly Thr Leu Pro Pro Glu Trp Ser Gly Met
85 90 95

Thr Ser Leu Asp Asp Leu Asn Leu His Asp Thr Ala Val Ser Gly Thr
100 105 110

Leu Pro Ala Gln Trp Ser Ser Met Lys Gln Leu Ile Asp Leu Asp Leu
115 120 125

Glu Gly Thr Lys Val Ser Gly Thr Leu Pro Pro Glu Trp Ser Gly Met
130 135 140

Ala Lys Ala Glu Ala Leu Gln Leu Lys Tyr Cys Asp Leu Ser Gly Ser
145 150 155 160

Leu Pro Pro Ser Trp Ser Ser Met Gln Lys Leu Arg Ile Val Ser Leu
165 170 175

Ser Gly Asn His Phe Cys Gly Cys Val Pro Asp Ser Trp Arg Glu Lys
180 185 190

Asp Arg Leu Asp Val Thr Ile Glu Glu Trp His Met Gly Glu Asp Cys
195 200 205

Lys Leu Ala Asn Ala Cys Arg Pro Thr Ala Ala Pro Gly Thr Thr Thr
210 215 220

Thr Asn Pro Pro Thr Thr Thr Gly Thr Pro Ala Ala Ser Ser Thr Pro
225 230 235 240

Ser Pro Gly Ser Gly Cys Glu Val Asp Gly Cys Glu Val Cys Glu Gly
245 250 255

Asp Ser Ala Ala Arg Cys Ala Arg Cys Arg Glu Gly Tyr Ser Leu Thr
260 265 270

Asp Glu Lys Thr Cys Leu Ala Asn His Asp Gly Gly Val Ala Ala Ala

275

280

285

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Ser Val Gly Leu Val Ala
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<210> 9

<211> 307

<212> PRT

<213> Leishmania amazonensis

<400> 9

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 35 40 45

Phe Leu Tyr Phe Ser Val Pro Cys Cys Pro Pro Lys Lys Lys Lys Lys
 50 55 60

Lys Lys Ile Gly Val Trp Met Gly Asp Val Asp Tyr Thr Gly Thr Leu
 65 70 75 80

Pro Glu Met Pro Ala Ser Val Asp Tyr Lys Asp Val Met Ile Thr Glu
 85 90 95

Leu Asn Phe Gly Ala Met Gly Gln Gly Leu Ser Gly Thr Leu Pro Pro
 100 105 110

Ser Trp Ser Ser Met Lys Gln Leu Ile Asp Leu Asp Leu Glu Gly Thr
 115 120 125

Lys Val Ser Gly Thr Leu Pro Pro Glu Trp Ser Gly Met Ala Lys Ala
 130 135 140

Glu Ala Leu Gln Leu Lys Tyr Cys Asp Leu Ser Gly Ser Leu Pro Pro
 145 150 155 160

Ser Trp Ser Ser Met Gln Lys Leu Arg Ile Val Ser Leu Ser Gly Asn
165 170 175

His Phe Cys Gly Cys Val Pro Asp Ser Trp Arg Glu Lys Asp Arg Leu
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Asp Val Thr Ile Glu Glu Trp His Met Gly Glu Asp Cys Lys Leu Ala
195 200 205

Asn Ala Cys Arg Pro Thr Ala Ala Pro Gly Thr Thr Thr Thr Asn Pro
210 215 220

Pro Thr Thr Thr Gly Thr Pro Ala Ala Ser Ser Thr Pro Ser Pro Gly
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Ser Gly Cys Glu Val Asp Gly Cys Glu Val Cys Glu Gly Asp Ser Ala
245 250 255

Ala Arg Cys Ala Arg Cys Arg Glu Gly Tyr Ser Leu Thr Asp Glu Lys
260 265 270

Thr Cys Leu Ala Asn His Asp Gly Gly Val Ala Ala Ala Ser Ser Gly
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Ala Val Ala Ala Ala Ala Val Trp Ala Ala Val Leu Leu Ser Val Gly
290 295 300

Leu Val Ala
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<210> 10

<211> 310

<212> PRT

<213> Leishmania amazonensis

<400> 10

Met Gly Asp Val Asp Tyr Thr Gly Thr Leu Pro Glu Met Pro Ala Ser
1 5 10 15

Val Asp Tyr Lys Asp Val Met Ile Thr Glu Leu Asn Phe Ser Ala Met
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Gly Gln Gly Leu Ser Gly Thr Leu Pro Pro Ser Trp Ser Ser Leu Thr
35 40 45

Ser Leu Ile Ser Leu Cys Ile Glu Lys Ser Glu Lys Val Thr Gly Thr
50 55 60

Leu Pro Ala Gln Trp Ser Ser Met Thr Ser Leu Asp Asn Leu Asn Leu
65 70 75 80

His Asp Thr Ala Val Ser Gly Thr Leu Pro Pro Glu Trp Ser Gly Met
85 90 95

Thr Ser Leu Asp Asp Leu Asn Leu His Asp Thr Ala Val Ser Gly Thr
100 105 110

Leu Pro Ala Gln Trp Ser Ser Met Lys Gln Leu Ile Asp Leu Asp Leu
115 120 125

Glu Gly Thr Lys Val Ser Gly Thr Leu Pro Pro Glu Trp Ser Gly Met
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Ala Lys Ala Glu Ala Leu Gln Leu Lys Tyr Cys Asp Leu Ser Gly Ser
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Leu Pro Pro Ser Trp Ser Ser Met Gln Lys Leu Arg Ile Val Ser Leu
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Ser Gly Asn His Phe Cys Gly Cys Val Pro Asp Ser Trp Arg Glu Lys
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Asp Arg Leu Asp Val Thr Ile Glu Glu Trp His Met Gly Glu Asp Cys
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Lys Leu Ala Asn Ala Cys Arg Pro Thr Ala Ala Pro Gly Thr Thr Thr
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Thr Asn Pro Pro Thr Thr Thr Gly Thr Pro Ala Ala Ser Ser Thr Pro
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Asp Ser Ala Ala Arg Cys Ala Arg Cys Arg Glu Gly Tyr Ser Leu Thr
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Lys Gly Asp Asp Phe Cys Phe Trp Glu Ser Val Val Val Arg Cys Asp
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Arg Ser Val Leu Gly Gly Lys Ser Val Arg Arg Ile Pro Ala Arg Cys
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Arg Arg Cys Leu Trp Thr Ser Thr Thr Arg Pro Ser Trp Ser Ser Thr
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Ser Thr Phe Pro Lys Trp Gly Trp Gly Trp Ala Glu Arg Cys Arg Thr
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Cys Arg Cys Gly Leu Arg Val Val Lys Val Leu Pro Ala Ser Cys Arg
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Pro Glu Trp Ala Ala Met Pro Lys Leu Arg His Val Glu Leu Lys Gly
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Ala Arg Cys Arg Glu Gly Tyr Phe Leu Thr Asp Glu Arg Thr Cys Leu
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